

Name _____

Multiply Tens, Hundreds, and Thousands

I Can use place value and other strategies to multiply tens, hundreds, and thousands.

Florida's B.E.S.T.

- Number Sense & Operations 4.NSO.2.2, 4.NSO.2.1
- Mathematical Thinking & Reasoning MTR.2.1, MTR.3.1, MTR.4.1

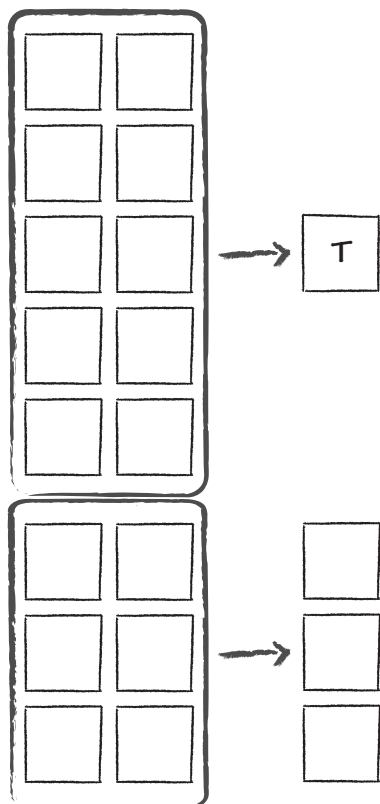


UNLOCK the Problem Real World

Each car on a train has 200 seats. How many seats are on a train with 8 cars?

Find 8×200 .

One Way Draw a quick picture.



Think: 10 hundreds = 1,000

Think: 6 hundreds = 600

$$1,000 + 600 = \underline{\hspace{2cm}}$$

Another Way Use place value.

$$8 \times 200 = 8 \times \underline{\hspace{2cm}} \text{ hundreds}$$

$$= \underline{\hspace{2cm}} \text{ hundreds}$$

$$= \underline{\hspace{2cm}} \text{ Think: 16 hundreds is 1 thousand, 6 hundreds.}$$

So, there are seats on a train with 8 cars.

Math Talk

MTR 3.1 Complete tasks with mathematical fluency.

How can finding 8×2 help you find 8×200 ?



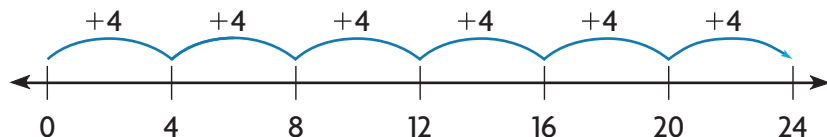
Other Ways

A Use a number line.

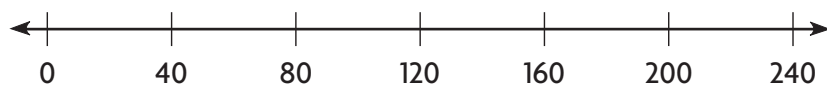
Li's Sled Shop rents 4,000 sleds each month.
How many sleds does the store rent in 6 months?

Find $6 \times 4,000$.

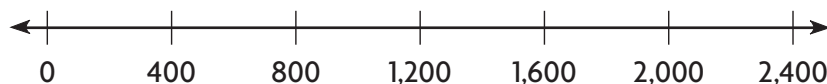
Multiplication can be thought of as repeated addition.
Draw jumps to show the product.



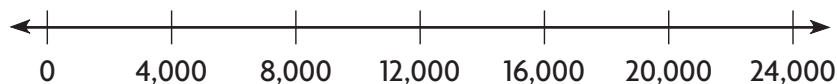
$$6 \times 4 = 24 \quad \leftarrow \text{basic fact}$$



$$6 \times 40 = 240$$



$$6 \times 400 = 2,400$$



$$6 \times 4,000 = 24,000$$

So, Li's Sled Shop rents _____ sleds in 6 months.

B Use patterns.

Basic fact:

$$3 \times 7 = 21 \quad \leftarrow \text{basic fact}$$

$$3 \times 70 = 210$$

$$3 \times 700 = \underline{\hspace{2cm}}$$

$$3 \times 7,000 = \underline{\hspace{2cm}}$$

Basic fact with a zero:

$$8 \times 5 = 40 \quad \leftarrow \text{basic fact}$$

$$8 \times 50 = 400$$

$$8 \times 500 = \underline{\hspace{2cm}}$$

$$8 \times 5,000 = \underline{\hspace{2cm}}$$

- How does the number of zeros in the product of 8 and 5,000 compare to the number of zeros in the factors? Explain.

**Math
Talk**

**MTR
4.1**

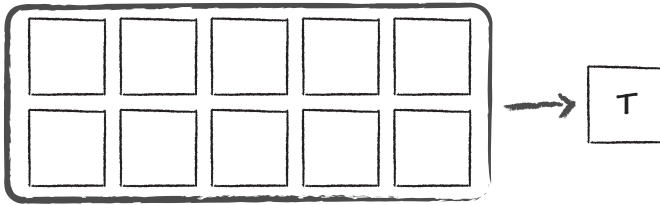
Engage in discussions on mathematical thinking.

Use Patterns to tell how the number of zeros in the factors and products changes in Example B.



Share and Show**Math Board**

1. Use the drawing to find
- 2×500
- .



$2 \times 500 = \underline{\hspace{2cm}}$

Math Talk**MTR 3.1** Complete tasks with mathematical fluency.Look for Structure to tell how you would use place value to find 2×500 .**Complete the pattern.**

2. $3 \times 8 = 24$

$3 \times 80 = \underline{\hspace{2cm}}$

$3 \times 800 = \underline{\hspace{2cm}}$

$3 \times 8,000 = \underline{\hspace{2cm}}$

3. $6 \times 2 = 12$

$6 \times 20 = \underline{\hspace{2cm}}$

$6 \times 200 = \underline{\hspace{2cm}}$

$6 \times 2,000 = \underline{\hspace{2cm}}$

4. $4 \times 5 = \underline{\hspace{2cm}}$

$4 \times 50 = \underline{\hspace{2cm}}$

$4 \times 500 = \underline{\hspace{2cm}}$

$4 \times 5,000 = \underline{\hspace{2cm}}$

Find the product.

$$\begin{aligned} \checkmark 5. \quad 6 \times 500 &= 6 \times \underline{\hspace{1cm}} \text{ hundreds} \\ &= \underline{\hspace{1cm}} \text{ hundreds} \\ &= \underline{\hspace{1cm}} \end{aligned}$$

$$\begin{aligned} 6. \quad 9 \times 5,000 &= 9 \times \underline{\hspace{1cm}} \text{ thousands} \\ &= \underline{\hspace{1cm}} \text{ thousands} \\ &= \underline{\hspace{1cm}} \end{aligned}$$

On Your Own**Find the product.**

7. $7 \times 6,000 = \underline{\hspace{2cm}}$

8. $4 \times 80 = \underline{\hspace{2cm}}$

9. $3 \times 500 = \underline{\hspace{2cm}}$

MTR Find the unknown factor.

10. $\underline{\hspace{1cm}} \times 9,000 = 63,000$

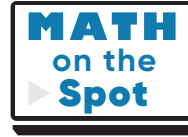
11. $7 \times \underline{\hspace{1cm}} = 56,000$

12. $8 \times \underline{\hspace{1cm}} = 3,200$

13. **MTR** How does the number of zeros in the product of 8 and 5,000 compare to the number of zeros in the factors? Explain.



UNLOCK the Problem



14. Joe's Fun and Sun rents beach chairs. The store rented 300 beach chairs each month in April and in May. The store rented 600 beach chairs each month from June through September. How many beach chairs did the store rent during the 6 months?

a. What do you need to know? _____

b. How will you find the number of beach chairs? _____

c. Show the steps you use to solve the problem.

d. Complete the sentences.

For April and May, a total of _____ beach chairs were rented.

For June through September, a total of _____ beach chairs were rented.

Joe's Fun and Sun rented _____ beach chairs during the 6 months.

15. Sveta makes bead necklaces. Beads are packaged in bags of 50 and bags of 200. Sveta bought 4 bags of 50 beads and 3 bags of 200 beads. How many

beads did Sveta buy? _____

16. Hyori has 3 books of 20 stamps and 5 books of 10 stamps. How many stamps does Hyori have? Complete the steps using the numbers on the tiles. Numbers can be used more than once.

$$\underline{\hspace{1cm}} \times 20 = \underline{\hspace{1cm}}$$

$$\underline{\hspace{1cm}} \times 10 = \underline{\hspace{1cm}}$$

$$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$



Multiply Tens, Hundreds, and Thousands

Go Online

Interactive Examples

Find the product.

1. $4 \times 7,000 = \underline{28,000}$

Think: $4 \times 7 = 28$ So, $4 \times 7,000 = 28,000$.

2. $9 \times 60 = \underline{\hspace{2cm}}$

3. $8 \times 200 = \underline{\hspace{2cm}}$

4. $5 \times 6,000 = \underline{\hspace{2cm}}$

5. $7 \times 800 = \underline{\hspace{2cm}}$

6. $8 \times 90 = \underline{\hspace{2cm}}$

7. $6 \times 3,000 = \underline{\hspace{2cm}}$

8. $3 \times 8,000 = \underline{\hspace{2cm}}$

9. $5 \times 500 = \underline{\hspace{2cm}}$

10. $9 \times 4,000 = \underline{\hspace{2cm}}$

Problem Solving

11. A bank teller has 7 rolls of coins. Each roll has 40 coins. How many coins does the bank teller have?

12. Theo buys 5 packages of paper. There are 500 sheets of paper in each package. How many sheets of paper does Theo buy?

13. Explain how finding 7×20 is similar to finding $7 \times 2,000$. Then find each product.

Lesson Check

14. A plane is traveling at a speed of 400 miles per hour. How far will the plane travel in 5 hours?
15. One week, a clothing factory made 2,000 shirts in each of 6 different colors. How many shirts did the factory make in all?

Spiral Review

16. Write a comparison sentence to represent this equation.
- $$6 \times 7 = 42$$
17. The population of Middleton is six thousand, fifty-four people. Write this number in standard form.

18. In an election for mayor, 85,034 people voted for Carl Green and 67,952 people voted for Maria Lewis. By how many votes did Carl Green win the election?
19. Freya picked 4 times as many green peppers as red peppers. If she picked a total of 20 peppers, how many green peppers did she pick?
